

CLAIMS

1. A battery pack comprising: a plurality of prismatic rechargeable batteries (2), each of which is formed by 5 accommodating an electrode assembly and a liquid electrolyte in a battery case (24) and sealing an open end of the case with a sealing plate (23), an electrode terminal (21) being provided in the sealing plate; a circuit substrate (3) formed with a battery management circuit for managing the operating state of 10 each rechargeable battery; and a pack case (5) for accommodating the rechargeable batteries (2) and the circuit substrate (3), wherein:

the plurality of rechargeable batteries are held by a frame (6, 7, 8) in such an arrangement that the batteries are oriented 15 in the same direction on their sealing-plate side, whereby the plurality of rechargeable batteries are integrated; the circuit substrate is mounted to a frame (6) for holding the sealing-plate side of the plurality of rechargeable batteries; and a resin mold is provided for covering a necessary surface of the circuit 20 substrate with a resin after the circuit substrate is electrically connected to the rechargeable batteries and to input and output terminals.

2. A battery pack comprising: a plurality of rechargeable 25 batteries (2), each of which is formed by accommodating an

electrode assembly and a liquid electrolyte in a battery case (24) and sealing an open end of the case with a sealing plate (23), an electrode terminal (21) being provided in the sealing plate; a circuit substrate (3) formed with a battery management 5 circuit for managing the operating state of each rechargeable battery; and a pack case (5) for accommodating the rechargeable batteries (2) and the circuit substrate (3), wherein:

the plurality of rechargeable batteries are held by a frame (6, 7, 8) in such an arrangement that the batteries are oriented 10 in the same direction on their sealing-plate side; the plurality of rechargeable batteries are connected in series and/or parallel by joining connection plates (9, 10, 11) to the electrode terminals of each rechargeable battery; and the circuit substrate is mounted such that connection projections 15 (29) formed to the connection plates are inserted into connection holes of the circuit substrate so that the connection projections are joined to the circuit substrate.

3. The battery pack according to claim 1 or 2, wherein the 20 rechargeable batteries (2) are formed in a flat prismatic shape and held by the frames (6, 7, 8) in parallel spaced relationship, largest flat surfaces of the batteries being directed opposite each other.

25 4. The battery pack according to claim 1, wherein the resin

mold covers a surface on which electronic components are mounted, including electrically conductive parts.

5. The battery pack according to claim 1, wherein the resin mold is formed by filling a resin in a recess (28) in which the circuit substrate (3) is accommodated to cover the circuit substrate, the recess being located in the frame (6) on the side of the sealing plate (23).